REMARKS

The above proposed amendment is provided in response to the Notice of Non-Compliant Amendment (Paper No.10), the first office action dated September 8, 2000 (Paper No.5) as well as in response to the Examiner interview which was conducted on October 24, 2000. Corrections have also been made to the amendment in order to fully comply with the office action dated February 14, 2001 (Paper No. 8). Examiner Thompson is thanked for the courteously conducted and productive interview. Applicants would be pleased to receive an interview Summary Record that was promised at the conclusion of that interview. To date, a copy of that Record has not been received.

The undersigned also wishes to thank Examiner Thompson for his prompt assistance in forwarding pages of the cited references that were missing with applicants' copy of the above-noted first Office Action.

The drawings and claims were objected to for various informalities. In response, the specification has been amended where proposed in the Office Action to correct the obvious grammatical and/or typographical errors. With regard to the objection to Figure 7, Applicants wish to point out that identifying numerals 52 through 81 have already been referenced in the specification on page 17, with the exception of numeral 72, which after the amendment ties the term "progress" function on page 17, line 21 of the disclosure to that element. In addition, numeral "82" in the specification has now been replaced with the correct numeral "81" to properly identify the "end" function identified in Figure 8. Numeral "108" has also been previously identified on page 21, line 15 of the specification. Applicants submit that these amendment do not introduce new matter

Claims 5 and 6 have now been canceled, and claims 1, 7, 8, 9 and 10 have been amended. Support for the amendments can be found throughout the specification and in particular on page 16, lines 1-13. In addition, new claims 11-23 have been added and are directed to additional embodiments of the invention.

Specifically, Claims 16 and 21 are written in independent format and encompass broader embodiments of the invention. Claim 23 is similar to old claim 1 with additional limitations added concerning the risk factors. Support for the new dependent claims may be found in the specification, as follows: claim 11: p. 21, lines 12-13; claim 12: p. 18, lines 12-14; claim 13: p. 16, lines 16-17; claim 14: p. 16, lines 16-17, claim 15, page 12 lines 11-14 and p. 19, lines 7-10; claim 16: p. 12, lines 11-14; claim 18: p. 18, starting at line 25; p. 21, line 10; claim 19: p. 12, lines 11-14; claim 20: p.16, lines 16-17; claim 21: p. 20, starting at line 23.

Claims 1-10 stand rejected under 35 U.S.C. §102(b) as being anticipated by Duncan, "A Guide to the Project Management Body of Knowledge." This rejection is respectfully traversed for the following reasons.

The present invention is directed to a method and apparatus that can be effectively utilized for modeling multiple tasks for multiple users. Applicants' system tracks to the estimated start and stop dates and/or the actual start and stop dates for a particular task in relation to a current tasking horizon window. These differences are classified as the "churn" values for the task.

The present system also allows one or more inputs or verbs to be associated with any churn measurement. These verbs describe the reason(s) for the churn. The verbs may then be analyzed to provide the system with individualized risk factors that can in turn be used to reduce churn and improve task efficiency.

Duncan, on other hand, relates on a very broad scale to managing an organization and its individuals. The author discusses inputs to organizational planning in highly generalized, theoretical terms. These inputs include such considerations as project interfacing, staffing requirements and constraints. Duncan provides little detail or guidance in actually designing and implementing a functional feedback system which can used to decrease task inefficiency.

Duncan also fails to teach or suggest an apparatus and method for proactively creating a task horizon which represents a current window of time over a plurality of timeframes in which tasks are expected to be finished. The definition relied on in the Office Action does not address the claim language in amended claim 1, for example, that a task horizon is described as being a window of time (see page 11, lines 23-26). Further, there is no teaching or suggestion in Duncan of a system that calculates anything similar to a negative churn or a positive churn and that this calculation is related to the movement of dates (whether they be actual or estimated) relative to the tasking horizon.

Moreover, Duncan does not disclose a system in which a risk factor can be represent or be assigned to the task as a result of analyzing the reasons for the churn. Duncan also does not provide any guidance on ultimately reducing churn, and thereby improving efficiency using the novel planning system and method as applicants have

described. Overall, Duncan fails to consider how to create negative or positive churn, how to calculate churn in the manner claimed by the applicants, how to associate a risk factor to a task and how a task-based risk factor is used to explain churn. While Duncan may broadly relate to various general ideas about management, the author does not suggest the detailed method and apparatus set forth in the proposed claims.

For at least the foregoing reasons, Duncan fails to anticipate or make obvious the limitations of Claim 1, as amended. As previously discussed, Duncan does not teach or suggest "a method for modeling tasks" or one in which "multiple tasks for multiple users" are modeled. Additionally, there is no teaching or suggestion in Duncan of "activating a current tasking horizon" which represents "one of a plurality of timeframes." Also, there is no suggestion or disclosure in Duncan regarding negative and positive churn or the way that these variable are calculated. Independent Claims 9 and 10 and new independent claims 17, 22 and 23 contains many of the same terms set forth in claim 1. For these and other reasons, these independent claims, as well as their dependent claims are allowable over Duncan and withdrawal of the rejection under 35 U.S.C. §102(b) is warranted.

The application is believed to be in condition for allowance, and prompt, favorable action thereon is earnestly solicited.

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Respectfully submitted,

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APPENDIX A

Version With Markings to Show Changes Made

IN THE SPECIFICATION:

Page 9, Section V, 2nd ¶:

The present invention can be run on an internal network as shown in figure 1 or over an external network (including the Internet) as shown in figure 2. Employees are connected to a network database 5 through the use of a PC at terminals 1, 2 and 3. A manager is also connected to the network database 5 through a PC at terminal 4. Those of ordinary skill in the art will understand that a PC with a Pentium processor, 16 megs of RAM, a 5 meg hard-drive, an operating system (such as Windows '95 or higher) and a 56k modem or network connection are adequate to implement the present invention. In its most basic embodiment the entire system can be provided on a single PC with a Pentium processor, 64 megs of RAM, a 5 GB hard-drive, an operating system (such as Windows NT or similar operating system) that multiple user's have access to. Likewise, in a hardwired embodiment, similar components may be provided in a hardwired form.

Page 13, table:

Task based	Employee based	Employee Specific
Harder than expected	Health	Children sick
Easier than expected	Too much work	Family emergency

Training needed	Too little work	Tired / NBA finals
New equipment	Bored	Asthma acting up

Page 13, last ¶:

As shown in figure 5 after a task has been assigned, the task needs to be scheduled 22, 24. Scheduling is accomplished by having the employee, or in some embodiments the employer, assign start and stop dates 26. Although the present invention is described with respect to start and stop dates, those of ordinary skill in the art will recognize that the invention may be implemented using a start date and a number of working hours or in any other time and work measurement system, such as a start date and cost. The start and stop dates set the standard against which the scheduler's planning abilities are measured. It is also expressly contemplated that a default start and stop date may be provided with the task that the employee may modify.

Page 17, 4th ¶:

If the employee chooses to view tasks 80, the system retrieves the tasks assigned to that employee 66 and displays them 68. If the task is new 70, the employee is provided with the ability to set the anticipated start and stop date 78. If the tasks is an existing tasks 74, the employee may update their progress 72 on any of the tasks 74. In addition, for each task that receives a data input, the employee is requested to enter a verb and/or to select a verb from a predetermined list. The logic diagram is ended at 8[2]1.

Page 18, 3rd full ¶:

When churn is encountered, it is important to know if the reason 38 for the churn and whether it has anything to do with the task itself or the individual who performed the task. The verb associated with the positive churn rate is analyzed to determine what if any effect it should have on an assigned risk factor 40.

Page 21, 1st full ¶:

Tasks are first extracted 86 and the associated churn and verbs are determined 88. The churn is classified as positive or negative 90. The verb, reason for the churn, is then analyzed 92. If verb categories are used, the verb can first be compared to the known employee dependent verbs 94. If the verb is employee based, in other words unique to that employee, the verb is compared to an expected norm value and a risk factor is assigned 96. The risk factor is recorded in a database 98 and, if necessary, an overall risk factor is modified 100 for the employee. If the churn is not employee dependent 94, the churn is next analyzed to determine if it is task related 102. If the churn is task related the churn is compared to a norm and assigned a weight 110 and the information is recorded 112. Likewise, the overall risk factor associated with that task may be modified 114. If the churn is not related to the employee or a particular task, it is classified as environmentally related 104. The churn is recorded 106 and the overall environmental risk factor associated with environmental related churn is modified 108. If another task/churn requires analyzing 115, it is sent through the same process until the program ends 116.

Page 22, 4th ¶:

One example of a predictive management center 118 is shown in figure 10. Tasks are identified 120 along with available employees 122 and the environment 124. Each employee's risk profile is extracted 126 from a database. Next, the tasks that will need to be completed are compared against the tasks that the employee's have performed in the past 128. Environmental and employee personal risk is added at step 130 and an average time for each task is computed together with a composite risk factor 132. Tasks that do not have a direct match 134 are identified and either an estimation is made by the operator how long each task should take to complete 136. Employee and environmental risk factors are added, together with the operator's new task predictive risk factor 138. A total completion time and project risk factor is then generated 140.

IN THE CLAIMS:

Please cancel claims 5 and 6 without prejudice or disclaimer.

Please amend the remaining claims as follows:

1. (Amended) A method for modeling [planning] multiple tasks for multiple users comprising the steps of:

breaking a project into said multiple tasks;

activating a current [selecting a] tasking horizon, said tasking horizon comprising one of a plurality of time frames over which said multiple tasks can be completed;

selecting a language [at least two verbs]for at least one of said multiple tasks;

receiving an actual [predicted start] date for said at least one of said multiple tasks;

receiving an estimated [actual start]date for said at least one task;

calculating a first negative churn if said received estimated date is created in or moved into said current tasking horizon;

calculating a first positive churn if said estimated date is deleted or moved out of said current tasking horizon;

calculating a second positive churn if said received estimated date exists in said current tasking horizon and said received actual date is moved out of or is created outside of said current tasking horizon;

calculating a third positive churn is said received actual date is moved out of said current tasking horizon and an accompanying received estimated date is not in said current tasking horizon;

calculating a second negative churn when said received actual date is created in or is moved into said current tasking horizon and said received estimated date is not in said current tasking horizon; and

receiving language [one of said at least two verbs] that corresponds to said actual [start] date, wherein a [said]verb describes a reason for said actual [start]date and for said churn.[;]

[comparing said predicted start date with said actual start date; and

computing churn of said at least one task;]

7. (Amended) The method as claimed in claim 1 further comprising the steps of:

comparing said tasks of said project to previously performed tasks;

extracting previously performed task completion data, said data including previous churn data and risk factor data; and computing an expected task completion time based at least in part on said previously performed task completion data.

8. (Amended) The method as claimed in claim 1 further comprising the steps of:

comparing said tasks of said project to previously performed tasks;

extracting a risk factor associated with said previously performed tasks;

and computing [an]a new risk factor based at least in part on said extracted risk factor.

9. (Amended) A method for modeling [planning]tasks comprising the steps of:

breaking a project into multiple tasks, wherein there is at least a first task and a second task;

selecting a current tasking horizon from a plurality of potential event horizons representing a plurality of timeframes;

selecting at least two verbs for said first task;

selecting at least two verbs for said second task;

assigning said first task to a first task assignment station;

assigning said second task to a second task assignment station;

receiving a predicted start date and a predicted completion data for said first task from said first task assignment station;

receiving a predicted start date and a predicted completion date for said second task from said second task assignment station;

receiving an actual start date and a first verb for said first task;

receiving an actual start date and a second verb for said second task;

computing churn of said first task;

computing churn of said second task;

computing a risk factor for said first task based on said first verb; and

computing a risk factor for said second [factor]task based on said second verb.

10. (Amended) An apparatus for task modeling [planning task]comprising:

a management module for breaking a project into tasks, selecting a tasking horizon and for assigning at least two verbs for at least one of said tasks;

a task assignment station for receiving said at least one task and for entering a predicted start date for said at least one task and for entering an actual start date;

wherein said management module and said task assignment station are operationally connected and wherein said management module receives said predicted start date and said actual start date and computes a churn and assigns a risk factor to said task based on at least one of said verbs, wherein said at least one verb describes a reason for said churn.

Please add the following new claims:

--11 (New) The method as claimed in claim 1 further comprising modifying said computed risk factor based on a subsequent churn value.

12. (New) The method as claimed in claim 11 wherein said method results in a reduction of said churn.

13. (New) The method as claimed in claim 1 wherein said actual dates comprise an actual start date and an actual stop date.

14. (New)The method as claimed in claim 1 wherein said received estimated dates comprise an estimated start date and an estimated stop date.

15. (New) The method as claimed in claim 1 further comprising assigning a risk factor to a second task which is dependent upon a first task.

16. (New) The method as claimed in claim 9, wherein said second task is dependent on said first task.

17. (New) A method for modeling tasks comprising the steps of:

breaking a project into tasks;

selecting a tasking horizon;

selecting at least two verbs for at least one of said tasks, each of said verbs is task dependent;

receiving a predicted start date and a predicted stop date for said at least one task;

receiving an actual start date and an actual stop date for said at least one task;

receiving one of said at least two verbs that corresponds to said actual start and stop dates, wherein said verb describes at least one reason for said actual start and stop dates;

comparing said predicted start and stop dates with said actual start and stop dates;

computing churn of said at least one task; and

reviewing said churn in view of said at least one verb, and assigning a risk factor to said task based on said review.

18. (New) The method as claimed in claim 16, wherein said risk factor is equal to a percentage of the time between said predicted start and stop dates.

19. (New) The method as claimed in claim 7, wherein said previous risk factor is task dependent.

20. (New) The apparatus as claimed in claim 10, wherein said apparatus classifies said churn as positive churn or negative churn.

21. (New) The apparatus as claimed in claim 19, wherein said apparatus is utilized in a churn monitoring program to reduce said churn.

22. (New) An apparatus for task modeling comprising:

a management module for breaking a project into tasks, selecting a tasking horizon and for assigning at least two verbs for at least one of said tasks;

a task assignment station for receiving said at least one task and for entering a predicted start and stop date for said at least one task and for entering an actual start and stop date;

wherein said management module and said task assignment station are operationally connected and wherein said management module receives said predicted start and stop dates and said actual start and stop dates and computes a churn and assigns a risk factor to said task based on at least one of said verbs having a reason associated therewith used to describe said churn.

23. (New) A method for modeling tasks comprising the steps of:

breaking a project into a plurality of tasks;

selecting a tasking horizon;

selecting at least two verbs for at least one of said tasks;

receiving a predicted start date for said at least one task;

receiving an actual start date for said at least one task;

receiving one of said at least two verbs that corresponds to said actual start date, wherein said verb describes a reason for said actual start date;

comparing said predicted start date with said actual start date; [and]

computing churn of said at least one task;

computing a risk factor based at least in part on at least one of said computed churn and said received verb.--